#### **REMARKS**

This paper is being presented in response to a non-final official action dated October 8, 2004, wherein: claims 1-22 were pending; claims 7, 8, and 13 were objected to; claims 1-4, 6-10, and 13-16 were rejected under 35 U.S.C. § 102(b); and claims 1-22 were rejected under 35 U.S.C. § 103(a).

### I. Brief Summary of the Amendments to the Claims

Claims 5, 6, and 14 have been canceled, without prejudice.

Claims 1 and 22 have been amended, without prejudice, to recite that the ink includes a "flaked metallic" pigment and "a co-solvent in an amount sufficient to render the drying rate of the ink on a non-porous substrate to less than ten seconds." Support is found in the paragraph bridging pages 3 and 4, and in each of Examples 1 to 6 in the specification as filed.

Dependent claim 15 has been amended to recite that the co-solvent comprises a volatile alcohol, and claim 16 has been amended to depend from claim 15. New dependent claim 23 recites the ink of claim 16 wherein the co-solvent comprises isopropyl alcohol. Support is found throughout the specification, including at page 1, lines 19-22, page 5, lines 10-20, and in each of Examples 1 to 6 in the specification as filed.

New dependent claim 24 recites an ink wherein the metallic pigment is aluminum. New dependent claim 25 recites an ink wherein the pigment size is at least 18 µm. Support for both claims is found in the paragraph bridging pages 3 and 4, and in each of Examples 1 to 6 in the specification as filed.

New dependent claim 26 recites a kit including a capillary marker containing the ink of claim 1 wherein the ink has a viscosity less than 20 cP, and a dry erase board. Support is found throughout the specification, including at page 6, lines 9-11, and Example 7.

No new matter has been added, and it is believed that the amendments do not require an additional search. Claims 1-4, 7-13, and 15-26 (23 total; 2 independent) are now pending. This paper is timely filed as it is accompanied by a petition under 37 C.F.R. § 1.136(a) for an extension of time to file in the first month, and payment of the required extension fee. A check in the amount of \$350 is enclosed to cover the fees for the extension of time, one additional claim in excess of twenty, and for the IDS.

The Commissioner is hereby authorized to charge any deficiency in connection with this Amendment, or any additional fees which may be required in connection with this Amendment, to Deposit Account No. 13-2855.

In view of the amendments and the arguments presented below, it is believed that the claims are in proper form for allowance.

#### II. Claim Objections

Claims 7, 8, and 13 were objected to on the apparent lack of clarity. The official action states that the claims recite ranges and requests that the elements be rewritten.

The objection is traversed. Initially, it is noted that the objection has no basis in the statues, the rules, or the MPEP. Indeed, no authority has been cited.

As for the substance of the objection, the official action states that each of the claims recites a range. Whether this is implicitly or explicitly true, it is immaterial. Viewed another way, each of the claims recites two elements. For example, dependent claim 7 recites that the ink comprises the pigment in an amount of at least about 0.1 wt.% as a first element and also recites that it comprises about 80 wt.% or less as a second element. The claims are plainly clear as written. Reconsideration is requested, with a view towards avoiding petition practice.

#### III. Claim Rejections - 35 U.S.C. § 102(b)

Claims 1-4, 6-10, and 13-16 were rejected as anticipated by JP 2000-256604 (JP '604). For the convenience of the Patent Office, we point out that JP '604 is related to U.S. Patent No. 6,458,192 (October 1, 2002), in that both claim priority to earlier-filed Japanese patent application 11-02708 (see patent family report, cited on the accompanying Form PTO/SB/08a/b).

As amended, the claims define over this type of prior art, which is directed to erasable inks for writing on porous substrates such as paper and erased by a rubber eraser or equivalent, as opposed to the present claims which more specifically recite elements in common with dry erase inks for use on non-porous substrates such as whiteboards, which are erasable by a felt eraser or equivalent (e.g., paper napkin or towel, or in practice even a finger for small corrections). Contrast Tsujio '192 at column 6, lines 19-25 (... "mere rubbing with a finger will not blur or erase the lines").

Furthermore, the claims now recite a "flaked metallic" pigment, which is neither disclosed nor suggested by the reference (e.g., claim 5 was not rejected).

Accordingly, the rejection can be withdrawn.

#### IV. Claim Rejections - 35 U.S.C. § 103(a)

#### a. Claims 1-10 and 13-22; Santini et al. U.S. Patent No. 5,968,241

Claims 1-10, 13-20, and 22 were identified as rejected as obvious in view of Santini '241 alone, and claim 21 was rejected as obvious in view of Santini '241 in combination with Bernhardt et al. U.S. Patent No. 5,286,291.

In view of the foregoing amendments to the claims, it is submitted that the rejections can be withdrawn. In other respects, the rejection is traversed.

## i. The Action is Incomplete and Does Not Comply with 37 C.F.R. § 1.104(b)

Under 37 C.F.R. § 1.104(c)(2), the examiner must designate as nearly as practicable the specific part(s) of each supporting reference used to establish a finding of obviousness. Additionally, § 1.104(c)(2) states that "[t]he pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified." It is respectfully submitted that the examiner's action does not clearly explain the pertinence of each reference and the specific parts thereof used to support the § 103(a) rejections. In particular, no reason was given for the purported rejection of claim 5, which recited metallic pigments.

The official action is deficient in that it does not provide sufficient reasoning for the rejection of claim 5 set forth therein, in violation of § 1.104(c)(2) (stating that in rejecting claims for obviousness, the pertinence of each reference, if not apparent, must be clearly explained). Accordingly, it is respectfully submitted that the Patent Office has failed to comply with § 1.104(c)(2) and, therefore, the action is incomplete under 37 C.F.R. § 1.104(b). Reconsideration of the rejection and consideration of the additional remarks presented herein are requested.

Notwithstanding the foregoing, the applicant submits the following response to the § 103(a) rejection of the claims.

#### ii. Proper Basis for a § 103(a) Rejection

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings of a plurality of references. Prior knowledge generally available to one of ordinary skill in the art must be supported by tangible teachings of reference materials. *Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.*, \_\_\_\_ USPQ2d \_\_\_\_\_, \_\_\_ (Fed. Cir. August 31, 2004). Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and must not be derived by hindsight from knowledge of the application's disclosure. *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991); *see also* MPEP § 2143 (8th ed., rev. 2, May 2004).

The Patent Office bears the burden of establishing a prima facie case of obviousness and "can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." In re Fine, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). To support a conclusion that a claimed combination is obvious, either (a) the references must expressly or impliedly suggest the claimed combination to one of ordinary skill in the art, or (b) the examiner must present a convincing line of reasoning as to why a person of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. Ex parte Clapp, 227 USPO 972, 973 (Bd. Pat. App. & Inter. 1985). It is "incumbent upon the examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference." Ex parte Levy, 17 USPQ2d 1461, 1462 (Bd. Pat. App. & Inter. 1990) (citing Lindemann Maschinenfabrik GmbH v. American Hoist and Derrick, 221 USPQ 481, 485 (Fed. Cir. 1984)). Where the teachings of various references conflict, the Patent Office must weigh the power of each reference to suggest solutions to one of ordinary skill in the art, considering the degree to which one reference might accurately discredit another. In re Young, 18 USPQ2d 1089 (Fed. Cir. 1991).

#### iii. No Prima Facie Case of Obviousness Has Been Made

The official action acknowledges that Santini '241 does not disclose or suggest an ink as claimed with particular respect to the pigment size. The reason for rejecting the present claims, however, is the assertion that,

when general conditions (i.e. particle size) are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by changing the size, shape, proportion of shape, degree and sequence of added ingredients through routine experimentation. (In re Rose, 105 USPQ 137; In re Aller 220F, 2d 454 [sic], 105 USPQ 233,235 (CCPA 1955); In re Dailey et al., 140 USPQ 47; In re Reese, 129 USPQ 402; In re Gibson 45 USPQ 230 [sic 5 USPQ 230]. Therefore it would have been obvious to one of ordinary skill in the art to use pigment particle size in the range as claimed by Applicant because that particle size is well known in the art, absence [sic] evidence to the contrary.

#### 1. The Cases Cited Do Not Stand for the Rejection as Applied

The official action cites several cases from MPEP 2144.04 et seq. for legal precedent, apparently as a source of rationale supporting the obviousness rejections.

First, it is an express guideline in MPEP 2144 that legal precedent can provide the rationale supporting an obviousness rejection only if the facts in the case are sufficiently similar to those in the application. The official action makes no showing, or effort at showing, that the facts in the cited cases are sufficiently similar to those in the application and instead cites the cases apparently as supporting general rules. Thus, a *prima facie* case of obviousness has not been established. Furthermore, as shown below, the facts are not similar here, and if anything the cases have been misapplied.

In the case of *In re Rose*, the change in size was the overall size of the claimed article. In fact, the claim recited a lumber package "of appreciable size and weight requiring handling by a lift truck." The prior art cited was lumber packages which could be lifted by hand. See MPEP 2144.04.IV.A. In the pending claims, the pigment size is but one element of the claimed ink -- not the entire claimed article. The claimed invention <u>must be considered as a whole</u>. MPEP 2141.02. Accordingly, the facts of *Rose* are not at all similar to those in the present application.

In the case of *In re Aller*, and cases like it, the court held that "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." See MPEP 2144.05.II.A. Again,

the facts in such cases were that the "general conditions" of the claim were known in the prior art. With respect to the pending claims, the Patent Office has made no such showing, nor, it is submitted, can such a showing be made. Instead the official action states only that the claimed particle sizes (in isolation) are known. The claimed invention <u>must be</u> <u>considered as a whole, MPEP 2141.02</u>, and it is submitted that the official action takes particle size out of the context of the claim in order to make the rejection.

Furthermore, with respect to *Aller*, the law also holds that the prior art must be considered in its entirety, including disclosures that teach away from the claims. MPEP 2141.02. The cited patent, Santini '241, does indeed teach away from the claims, in that the only pigments disclosed are the sub-micron-sized HOSTAFINE pigments marketed by Hoechst Celanese. It is further submitted that such sub-micron pigments are typical of those used in prior art dry-erase inks, as opposed to the presently claimed inks. Thus, the facts of *Aller* are not sufficiently similar to those in the present application, and to the extent that they are similar at all, the cited art teaches away.

The case of *In re Dailey et al.*, which addressed a configuration of a claimed disposable plastic nursing container, is apparently irrelevant to the rejected claims, and its significance has not been pointed out in the official action. It is clear from MPEP 2144 that the case does not provide a general rule that all changes in shape are *prima facie* obvious. To the extent that the case would be further relied upon by the Patent Office in rejecting the pending claims, it is submitted that Examples 7 and 8 of the specification evidence significant differences in erasability and washability performance over the prior art.

The case of *In re Reese* concerned claims to a pharmaceutical product reciting proportions of three principal ingredients to achieve a stated result. The court held that "[s]ince the result sought and the ingredients used were known, it was within the expected skills of one having ordinary skill in the art to arrive at the optimum proportion of those ingredients. The knowledge that boric acid would react with tartaric acid tells such a person that an optimum ratio exists." The case concerns proportions of known ingredients, and is not analogous to the facts under consideration in the pending application. Furthermore, the examiner has made no showing that the specific ingredients used in the present claims were known for achieving the result sought, which would be one prerequisite to drawing an analogy with *Reese*.

The holding of *In re Gibson* concerned selection of order of mixing ingredients, see MPEP 2144.04.IV.C, and is inapplicable to the pending claims.

Accordingly, the rejection must be withdrawn because the facts in the cited cases are not sufficiently similar to those in the application and, thus, the legal precedent cited does not provide a rationale for supporting the obviousness rejection.

# 2. The Reason for the Rejection Amounts to an "Obvious to Try" Standard, Which Has Been Rejected by the Courts

The rationale supporting the rejection, that "it would have been obvious to one of ordinary skill in the art to use pigment particle size in the range as claimed by Applicant because that particle size is well known in the art" also amounts to an improper "obvious to try" standard.

The admonition that "obvious to try" is not the standard under § 103 has been directed mainly at two kinds of error. In some cases, what would have been "obvious to try" would have been to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful. *E.g.*, *In re Geiger*, 815 F.2d at 688, 2 USPQ2d at 1278; *Novo Industri A/S v. Travenol Laboratories, Inc.*, 677 F.2d 1202, 1208, 215 USPQ 412, 417 (7th Cir.1982); In re Yates, 663 F.2d 1054, 1057, 211 USPQ 1149, 1151 (CCPA 1981); *In re Antonie*, 559 F.2d at 621, 195 USPQ at 8-9.

In others, what was "obvious to try" was to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it. *In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1532 (Fed. Cir. 1988); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1380, 231 USPQ 81, 90-91 (Fed. Cir. 1986), *cert. denied*, 480 U.S. 947, 107 S.Ct. 1606, 94 L.Ed.2d 792 (1987); *In re Tomlinson*, 363 F.2d 928, 931, 150 USPQ 623, 626 (CCPA 1966).

When the prior art fails to suggest the result-effect variable, elements defining the result-effect variable are distinguishing elements. Under U.S. patent law, a *prima facie* case of obviousness cannot be based on an argument that the claimed invention was simply obvious to try. See In re Yates, 211 USPQ 1149, 1151, 663 F.2d 1054, 1057 (CCPA 1981) (prima facie case of obviousness was not established by the PTO on patent concerning a

process for oxidizing an olefin to an unsaturated aldehyde, since examiner merely suggested a reason why it might have been obvious to try varying a number of parameters); *In re Antonie*, 195 USPQ 6, 9, 559 F.2d 618, 620 (CCPA 1977) (patent application for rotating biological contactor apparatus held not obvious, merely obvious to try, because inventor varied every parameter of a system in order to optimize the effectiveness of the system without guidance from the prior art as to which parameters to vary or how to vary them).

In the pending official action, there has been no showing that the prior art teaches pigment size as a result-effective variable in the context of the claimed invention. Accordingly, the rejection must be withdrawn for the additional, independent reason that the rejection is an improper "obvious to try" rejection.

#### b. Claims 1-22; Santini et al. U.S. Patent No. 6,040,359

Claims 1-20 and 22 were rejected as obvious in view of Santini '359 alone, and claim 21 was rejected as obvious in view of Santini '359 in combination with Bernhardt '291.

The rejection based on Santini '359 cites the same legal authority and applies the same reasoning as the rejection based on Santini '241, and is improper for the same reasons cited above with respect to Santini '241.

As with Santini '241, Santini '359 teaches away from the claimed invention in that it, like other dry erase ink art, teaches the use of sub-micron sized pigments (see column 6, lines 15-39). In addition, Santini '359 further teaches away from the claimed invention in that it teaches the use of a dyeblocker for improving washability.

Accordingly, the rejection must be withdrawn.

#### V. Conclusion

In the absence of more pertinent prior art, withdrawal of the rejections and allowance of all pending claims are respectfully requested.

Should the examiner wish to discuss the foregoing, or any matter of form or procedure in an effort to advance this application to allowance, the examiner is urged to telephone the undersigned attorney at the indicated number.

Respectfully submitted,

MARSHALL, GERSTEIN & BORUN LLP

February 8, 2005

Ву

Michael Muczynski/(Reg. No. 48,642)

Attorney for Applicants

6300 Sears Tower

233 South Wacker Drive

Chicago, Illinois 60606-6357

Phone: (312) 474-6300 Fax: (312) 474-0448